



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D5473-045
Job Sheet 196894



Part No: D5473-045

Job Qty: 2 pcs

Part Name: Fuel Gauge Assembly



Part Weight: 0 lbs

Job Created: 6/24/19

Due Date: 6/27/19

Type: SOLD

Status: New

Priority: Medium

Job Tracking No:

Created By: Linda Lacelle

Description:

Note: D5473 REV.A IPP REV:A 17.10.24 NEW ISSUE DD VERF:JFS

Ship Via:

Bill of Materials

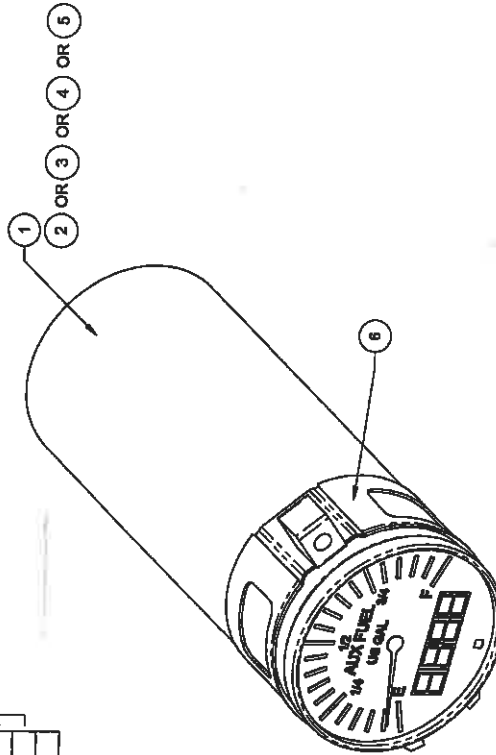
Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Small Fab - 1	2 pcs	6/27/19		0.00	0.50	Small Fab - 1		Smr 19/6/25
							Small Fab - 2		
							Small Fab - 3		
							Small Fab - 4		
							Small Fab - 5		
							Small Fab - 6		
							Small Fab - 7		
110	QC 5	2 pcs	6/27/19		0.00	0.00	QC 5 - 10		DAS 40 8-89
							QC 5 - 12		
							QC 5 - 17		
							QC 5 - 18		
							QC 5 - 19		
							QC 5 - 22		
							QC 5 - 24		
							QC 5 - 3		
							QC 5 - 43		
							QC 5 - 49		
							QC 5 - 51		
							QC 5 - 58		
							QC 5 - 68		
							QC 5 - 9		
							QC 5 - 50		
							QC 5 - 30		
							QC 5 - 40		
120	Packaging 3-1 - Stock - B4B	2 pcs	6/27/19		0.00	0.00	Packaging 3 - 1 - B4B		DAS 28 8-89
							Packaging 3 - 2 - B4B		
							Packaging 3 - 3 - B4B		
							Packaging 3 - 4 - B4B		
							Packaging 3 - 5 - B4B		
							Packaging 3 - 6 - B4B		
							Packaging 3 - 7 - B4B		

				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	VL ST 244
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
130 QC 21 - SA	2 pcs	6/27/19	0.00 0.00	QC 21 - SA - 21	DAB 21 JUL 05 2019
				QC 21 - SA - 70	9-05
				QC 21 - SA - 53	
Part Op 100 - 1- ASSEMBLE AS PER DWG X Load CALIBRATION File Per the INstruction (See Note 8) per DWG Descriptions: 110 - (QC5- Inspect part completeness to step on W/O) 1- LOAD CALIBRATION FILE PER THE INSTRUCTION (SEE NOTE 8) AS PER DWG 120 - (Identify as per dwg & Stock Location: _____) 130 - (QC21- Final Inspection - Work Order Release)					
1. with printed Load File provided from step 100 Inspect File to match the D350-794-Calibration file with the corresponding gauge. SMO 19/06/26					
GA119 GA018					
DAS 51 89					
Job BOM					
Part / Item	Component Name	Quantity	Operation	Container	
D5473-1	Fuel Gauge	2 pcs (1 ea)	100-Small Fab - 1	S183719	
MS28042-1A	Clamp - Instrument Mount	2 Ea (1 ea)	100-Small Fab - 1	S174205	
Job Allocations					
Operation	Component Part	Required	Inventory	Allocated	
100-Small Fab - 1	D5473-1	2	5	0	
	MS28042-1A	2	9	0	
Part Specifications					
Specifications could not be found.					

ITEM	QTY -041	QTY -043	QTY -045	QTY -047	P/N	DESCRIPTION
	X				D5473-041	FUEL GAUGE ASSEMBLY D350-794-011 INSTALLATION
		X			D5473-043	FUEL GAUGE ASSEMBLY D130-794-021 INSTALLATION
			X		D5473-045	FUEL GAUGE ASSEMBLY D350-794-111 INSTALLATION
				X	D5473-047	FUEL GAUGE ASSEMBLY D130-794-121 INSTALLATION
1	1	1	1	1	D5473-1	FUEL GAUGE
2	1				D350-794-CAL1	AS350 CALIBRATION FILE
3		1			D130-794-CAL1	EC130 CALIBRATION FILE
4			1		D350-794-CAL2	AS350 CALIBRATION FILE
5				1	D130-794-CAL2	EC130 CALIBRATION FILE
6	1	1	1	1	MS20042-1A	CLAMP - INSTRUMENT MOUNT

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D5473-04X FUEL GAUGE ASSEMBLY

- NOTES:
- 1) MATERIAL: N/A
 - 2) FINISH: N/A
 - 3) TOLERANCES: N/A
 - 4) UNITS: N/A
 - 5) BREAK SHARP EDGES: N/A
 - 6) IDENTIFICATION: IDENTIFY WITH DART PIN "D5473-04X" PER QSI 044 6.1
 - 7) WEIGHT: N/A
 - 8) LOAD CALIBRATION FILE PER THE INSTRUCTIONS FOUND IN SECTION 6.2 OF THE CALIBRATION PROCEDURE CAL-D350-794-1 Rev A, OR LATER APPROVED REVISION.

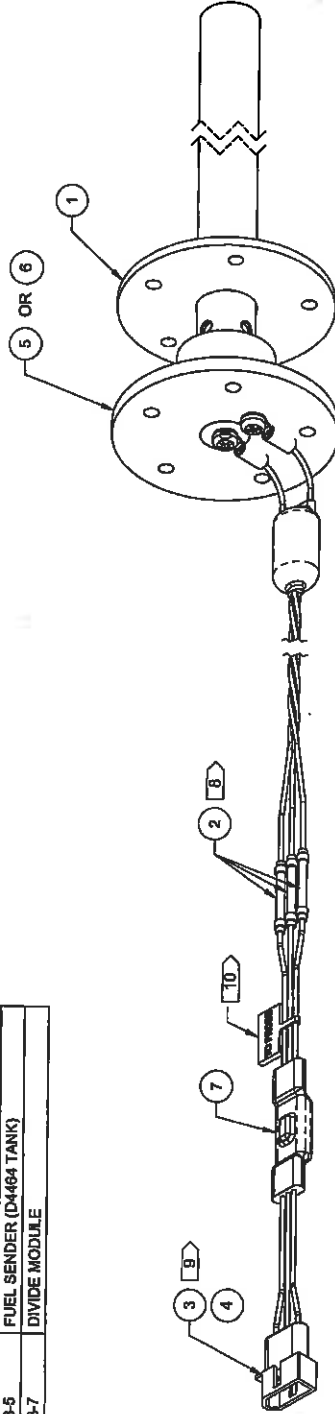
RELEASED
2017-10-06
01

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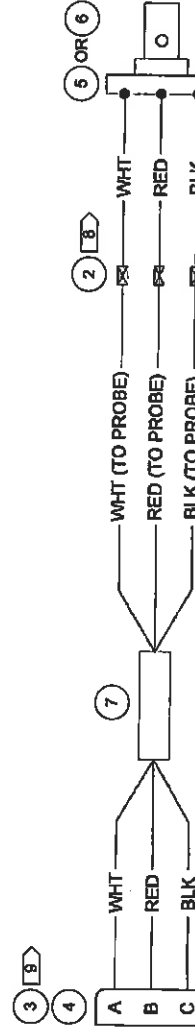
A	NEW ISSUE	DESCRIPTION	WK	BY	DATE
REV.					
DESIGN	WK	DART AEROSPACE LTD			
DRAWN	WK	HAWKESBURY, ONTARIO, CANADA			
CHECKED	RF	DRAWING NO.			
MFG. APPR.	RQ	D5473			
APPROVED	HS	TITLE			
DE APPR.	DS	FUEL GAUGE & SENDER			
DATE	17.07.04	SCALE			
		NTS			

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ITEM	QTY -061	QTY -063	P/N	DESCRIPTION
	X		D5473-061	FUEL SENDER ASSEMBLY (D4055 TANK)
		X	D5473-063	FUEL SENDER ASSEMBLY (D4464 TANK)
1	1	1	D4025-3	GASKET
2	3	3	D4280-18	WIRE SPLICE (BLUE)
3	3	3	D4290-35	CRIMP PIN
4	1	1	D4280-41	PLUG HOUSING
5	1		D5473-3	FUEL SENDER (D4055 TANK)
6		1	D5473-5	FUEL SENDER (D4464 TANK)
7	1	1	D5473-7	DIVIDE MODULE



D5473-06X FUEL SENDER ASSEMBLY

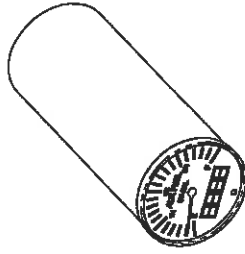


NOTES:
1) MATERIAL: N/A
2) FINISH: N/A
3) TOLERANCES: N/A
4) UNITS: N/A
5) BREAK SHARP EDGES: N/A
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D5473-06X" PER QSI 044 6.1
7) WEIGHT: N/A
8) CRIMP USING A RAYCHEM AD-1377 OR EQUIVALENT CRIMP TOOL
9) CRIMP USING A MOLEX 63819-1200 OR EQUIVALENT CRIMP TOOL
10) REMOVE "TO PROBE" LABEL AFTER ASSEMBLY

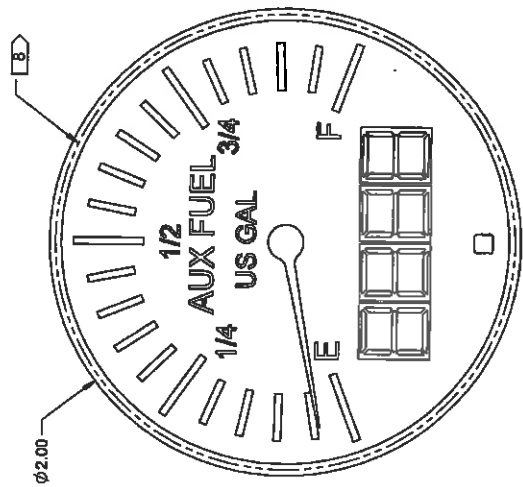
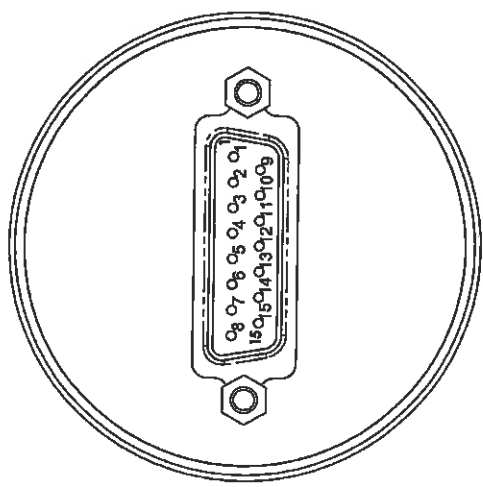
D5473-06X FUEL SENDER ASSEMBLY WIRING DIAGRAM

DESIGN	WK	DART AEROSPACE LTD
DRAWN	WK	HAWKESBURY, ONTARIO, CANADA
CHECKED	RF	DRAWING NO. D5473
MFG. APPR.	RQ	REV. A
APPROVED	HS	SHEET 2 OF 5
DATE	DS	TITLE
17.07.04		FUEL GAUGE & SENDER
		SCALE
		NTS

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- PIN CALLOUT:
- 1 - POWER IN (14 OR 28 VDC)
 - 2 - RS-232 TX OUT TO DB9 PIN 2
 - 3 - RS-232 RX IN TO DB9 PIN 3
 - 4 - CONSTANT POWER, OPTIONAL (9 TO 28 VDC)
 - 5 - YELLOW CAUTION OUT
 - 6 - EXTERNAL SWITCH INPUT
 - 7 - P-300C (BLACK) TO P-300C/4 MODULE (GROUND)
 - 8 - NOT USED
 - 9 - GROUND
 - 10 - GROUND TO DB9 PIN 5
 - 11 - GROUND
 - 12 - RED WARNING OUT
 - 13 - BACKLIGHT CONTROL (0 TO 40 VDC)
 - 14 - P-300C (RED) TO P-300C/4 MODULE (5 VDC)
 - 15 - P-300C (WHITE) TO P-300C/4 MODULE (SIGNAL)



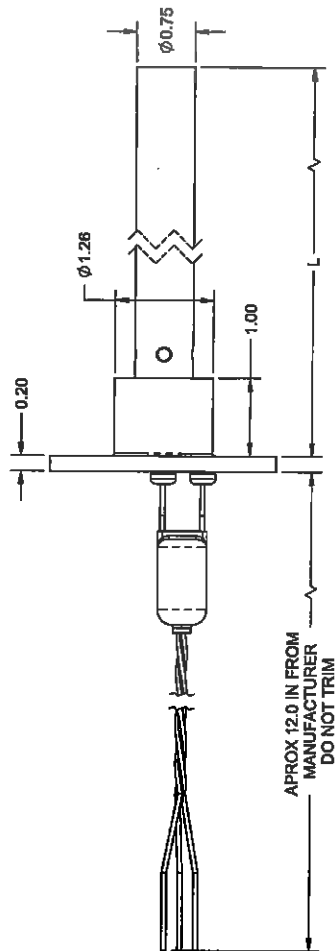
D5473-X FUEL GAUGE

DART PART NUMBER	MANUFACTURER	MANUFACTURER PART NUMBER	OPERATING TEMPERATURE	POWER CONSUMPTION	OPERATING VOLTAGE	TECHNICAL STANDARD ORDER	ENVIRONMENTAL QUALIFICATION
D5473-1	ELECTRONICS INTERNATIONAL INC.	TR-1FL-D1	-40°C TO +70°C -40°F TO 158°F	8 TO 55 VOLTS, 0.075 AMPS	28 VDC	TSO-C55A	DO-160G

- NOTES:
- 1) MATERIAL: N/A
 - 2) FINISH: N/A
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: N/A
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 0.30lb
 - 8) WHITE GRAPHICS ON BLACK BACKGROUND

DESIGN	WK	DART AEROSPACE LTD	
DRAWN	WK	HAWKESBURY, ONTARIO, CANADA	
CHECKED	RF	DRAWING NO.	REV. A
MFG. APPR.	RQ	D5473	SHEET 3 OF 5
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	FUEL GAUGE & SENDER	NTS
DATE	17.07.04		

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2017-10-06



DART PART NUMBER	ASSOCIATED TANK ASSEMBLY	MANUFACTURER	MANUFACTURER PART NUMBER	LENGTH "L" (INCHES)	WEIGHT (LBS)	TECHNICAL STANDARD ORDER (TSO)	ENVIRONMENTAL QUALIFICATION
D5473-3	D4055	ELECTRONICS INTERNATIONAL INC	P-300C-D1	25.50	0.51	TSO-C55A	DO-160G
D5473-5	D4464	ELECTRONICS INTERNATIONAL INC	P-300C-D3	23.63	0.50	TSO-C55A	DO-160G

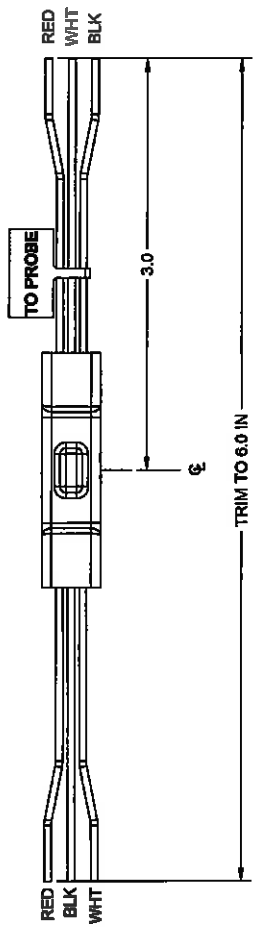
- NOTES:
- 1) MATERIAL: N/A
 - 2) FINISH: N/A
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: N/A
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: SEE TABLE
 - 8) RECEIVING INSPECTION REQUIREMENTS:
 - a) INSPECT FOR VISUAL DAMAGE
 - b) OVERALL CYLINDER LENGTH - SEE TABLE

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DESIGN	WK	DART AEROSPACE LTD	
DRAWN	WK	HAWKESBURY, ONTARIO, CANADA	
CHECKED	RF	DRAWING NO.	REV. A
MFG. APPR.	RQ	D5473	SHEET 4 OF 5
APPROVED	HS	TITLE	SCALE
DE APPR.	D8	FUEL GAUGE & SENDER	NTS

RELEASED
2017-10-06

8 7 6 5 4 3 2 1

D C B A



D5473-X DIVIDE MODULE

DART PART NUMBER	DESCRIPTION	MANUFACTURER	MANUFACTURER PART NUMBER	LENGTH "L" (INCHES)	WEIGHT (LBS)
D5473-7	DIVIDE MODULE	ELECTRONICS INTERNATIONAL INC	P-300C/4	N/A	0.05

- NOTES:
- 1) MATERIAL: N/A
 - 2) FINISH: N/A
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: N/A
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: SEE TABLE
 - 8) INSPECT FOR VISUAL DAMAGE
 - 9) THIS PART IS INCLUDED WITH THE FUEL SENDER

DESIGN	WK	DART AEROSPACE LTD	
DRAWN	WK	HAWKESBURY, ONTARIO, CANADA	
CHECKED	RF	DRAWING NO.	REV. A
MFG. APPR.	RQ	D5473	SHEET 5 OF 6
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	FUEL GAUGE & SENDER	
DATE	17.07.04	NTS	

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8 7 6 5 4 3 2 1

ALL Configuration Data MAIN MENU
Item#, Name, Current Value

1,Model Name,TR-1-FL-D1
3,Unit ID,211538
4,MFG Date,468
5,Input Type,2
6,Switch Input,0
7,RS232 Output,0
8,RS232 Input,0
9,RS232 Baud Rate,57600
10,RS232 Output Rate,500
11,HW Version,1
12,Base Config,0
14,Backlight Type ,0
15,Photocell Low,10
16,Photocell High,2700
17,Pot Low,9
18,Pot High,424
19,Pot Low Threshold,12
20,Digits Dim (ADV),3.000000
21,Digits Bright (ADV),60.000000
22,Dial Dim (ADV),9.000000
23,Dial Bright (ADV),80.000000
24,Constant,800
25,LED Maximum (ADV),100
26,LED Minimum (ADV),5
27,Pot Ratiometric,0
28,Brightness Lo,10.000000
29,Brightness Hi,100.000000
32,5V Calibration,0
33,Ref Ch Gain,1.000000
34,Ref Ch Offset,0.000000
35,Ref Ch Map Enabled,0
36,Ref Ch Filter,20
37,Ref Chan Ratiometric,0
38,Gain,1.000000
39,Offset,0.000000
40,Reference Chan,0
41,Allow Neg,0
42,Filter,60
43,Dejitter,3
44,Rounding,0.500000
45,Decimal Plcs,1
46,Zero Snap,1.000000
47,KFactor,0.000000
48,Map Enabled,1
49,Input at Maximum,0.000000
50,Spike Filter,1200.000000
51,Ratiometric,0

52,Raw Gain,1.000000
53,Raw Offset,0.000000
56,Needle Hardstop,286.000000
57,Needle Filter,1000
58,Needle Dejitter,3
59,BV Gain,1.000000
60,BV Offset,0.000000
61,BV Filter,400
62,Needle Home,45.000000
63,Maximum Value,0.000000
66,Extrapolation,1
67,Map IN A,3915.000000
68,Map OUT A,0.000000
69,Map IN B,3675.000000
70,Map OUT B,4.120000
71,Map IN C,3400.000000
72,Map OUT C,10.020000
73,Map IN D,3165.000000
74,Map OUT D,16.030001
75,Map IN E,2960.000000
76,Map OUT E,22.000000
77,Map IN F,2785.000000
78,Map OUT F,27.980000
79,Map IN G,2620.000000
80,Map OUT G,34.020000
81,Map IN H,0.000000
82,Map OUT H,0.000000
83,Map IN I,0.000000
84,Map OUT I,0.000000
85,Map IN J,0.000000
86,Map OUT J,0.000000
87,Digit Value A,0.000000
88,Dial Deg A,45.000000
89,Digit Value B,34.000000
90,Dial Deg B,255.000000
91,Digit Value C,40.000000
92,Dial Deg C,270.000000
93,Digit Value D,0.000000
94,Dial Deg D,0.000000
95,Digit Value E,0.000000
96,Dial Deg E,0.000000
97,Digit Value F,0.000000
98,Dial Deg F,0.000000
99,Digit Value G,0.000000
100,Dial Deg G,0.000000
101,Digit Value H,0.000000
102,Dial Deg H,0.000000
103,Digit Value I,0.000000
104,Dial Deg I,0.000000
105,Digit Value J,0.000000
106,Dial Deg J,0.000000
107,LED1 Start A,0.000000

108,LED1 End A,0.000000
109,LED1 Start B,0.000000
110,LED1 End B,0.000000
111,LED1 Start C,0.000000
112,LED1 End C,0.000000
113,LED1 Start D,0.000000
114,LED1 End D,0.000000
115,LED1 Start E,0.000000
116,LED1 End E,0.000000
117,LED2 Start A,0.000000
118,LED2 End A,0.000000
119,LED2 Start B,0.000000
120,LED2 End B,0.000000
121,LED2 Start C,0.000000
122,LED2 End C,0.000000
123,LED2 Start D,0.000000
124,LED2 End D,0.000000
125,LED2 Start E,0.000000
126,LED2 End E,0.000000
127,Red Output Start A,0.000000
128,Red Output End A,10.000000
129,Red Output Start B,0.000000
130,Red Output End B,0.000000
131,Red Output Start C,0.000000
132,Red Output End C,0.000000
133,Red Output Start D,0.000000
134,Red Output End D,0.000000
135,Red Output Start E,0.000000
136,Red Output End E,0.000000
137,Yellow Out Start A,0.000000
138,Yellow Out End A,30.000000
139,Yellow Out Start B,0.000000
140,Yellow Out End B,0.000000
141,Yellow Out Start C,0.000000
142,Yellow Out End C,0.000000
143,Yellow Out Start D,0.000000
144,Yellow Out End D,0.000000
145,Yellow Out Start E,0.000000
146,Yellow Out End E,0.000000

pw DTR928

Version: TR-1 2.15
FW Tracking Number 10

Current Input Readings
Bus Voltage: 27.02V
Raw Primary Input: 4093.5974
Displayed Value: 0.00
Needle Degrees: 44.92

Backlight Current Values
Backlight Control Type = 0 (Photocell)
Photocell Input: 1713
Pot Input: 11
Digit Output: 39.08
Illum Output 53.94
Bus Voltage: 27.0168

MAIN MENU, Press M for Menu
To SET a value: Type S followed by the item number and the new value.
[MAIN] >